

Abstract

The present invention relates to methods for producing a biological substance, comprising: (a) cultivating a fungal host cell in a medium conducive for the production of the biological substance, wherein the fungal host cell comprises a first nucleic acid sequence encoding the biological substance operably linked to a second nucleic acid sequence comprising a promoter variant selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, and SEQ ID NO: 12; and a subsequence thereof; and hybrid and tandem promoters thereof; and (b) isolating the biological substance from the cultivation medium. The present invention also relates to the isolated promoter variants and to constructs, vectors, and fungal host cells comprising the promoter variants operably linked to nucleic acid sequences encoding biological substances: